Signal Interfacing Techniques To Simplify Integrated Circuit Radio Designs

Abstract

A signal interfacing technique for connecting signals between a signal processing device and a radio integrated circuit (IC) involving multiplexing two or more signals on a connection pin between the radio IC and a signal processing device. According to one technique, transmit and receive signals are multiplexed such that during a transmit mode a transmit signal is coupled on the connection pin from the signal processing device to the radio IC, and during a receive mode a receive signal is coupled from the radio IC on the connection pin to the signal processing device. According to another technique, in-phase (I) and quadrature (Q) signals are multiplexed on a connection pin during both transmit and receive modes.